Application Serial No.: 09/780,636 Amendment dated: January 29, 2004

## IN THE CLAIMS

All the claims on file are reproduced below:

1. (Currently amended) A system for automating an electronic-commerce transaction using a virtual shopping cart initiated at a host site, comprising:

a merchant schema database that contains information about schemas used by a plurality of heterogeneous <u>and unrelated</u> merchants' sites;

a shopping cart manager that creates the virtual shopping cart based on a user's search query, and that monitors the content of the virtual shopping cart; [[and]]

a comparison shopping engine that automatically collects and manages information from the plurality of heterogeneous <u>and unrelated</u> merchants' sites, across multiple independent transaction sessions initiated by the host site, based on the user's search query, and that returns a corresponding comparative search result, without requiring the user to leave the host site to visit the plurality of heterogeneous <u>and unrelated</u> merchants' sites <u>while the comparison shopping engine is automatically collecting and managing information from the plurality of heterogeneous and unrelated merchants' sites; and</u>

a protocol broker module that selectively communicates with the plurality of heterogeneous and unrelated merchants' sites using at least one of the schemas in the merchant schema database, in order to execute a transaction for each item in the virtual shopping cart.

2 - 3. (Canceled)

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4. (Currently amended) The system of claim [[3]] 1, further comprising a user profile manager that maintains [[the]] a user profile database and the merchant schema database.

- 5. (Previously presented) The system of claim 4, further comprising a shopping cart database that stores a plurality of data structures necessary to manage a plurality of shopping carts and items contained in the plurality of shopping carts.
- 6. (Original) The system of claim 5, wherein the merchant schema database contains information about the plurality of merchants, their communication protocols, and how any one or more of the following functions are implemented for each merchant:
- add function, that adds an item to the virtual shopping cart;
- checkout function, that guides the shopper through a check out process;
- account retrieval feature, that provides account information;
- confirm order feature, that confirms a shopper's order;
- order confirmation feature, that receives order confirmation data.
- 7. (Original) The system of claim 5, wherein the protocol broker parses and analyzes the shopping request related to an item in the virtual shopping cart, to retrieve a corresponding merchant protocol from the merchant schema database.
- 8. (Original) The system of claim 7, wherein the corresponding merchant protocol is HTTP, and information related to the item in the virtual shopping cart is encoded, at least in part, in HTML.

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9. (Currently amended) A shopping agent site for automating an electronic-commerce transaction using a virtual shopping cart initiated at a host site, comprising:

a merchant schema database that contains information about schemas used by a plurality of heterogeneous <u>and unrelated</u> merchants' sites;

a shopping cart manager that creates the virtual shopping cart based on a user's search query, and that monitors the content of the virtual shopping cart; [[and]]

a comparison shopping engine that automatically collects and manages information from the plurality of heterogeneous and unrelated merchants' sites, across multiple independent transaction sessions initiated by the host site, based on the user's search query, and that returns a corresponding comparative search result, without requiring the user to leave the host site to visit the plurality of heterogeneous and unrelated merchants' sites while the comparison shopping engine is automatically collecting and managing information from the plurality of heterogeneous and unrelated merchants' sites; and

a protocol broker module that selectively communicates with the plurality of heterogeneous and unrelated merchants' sites using at least one of the schemas in the merchant schema database, in order to execute a transaction for each item in the virtual shopping cart.

10. (Canceled)

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11. (Currently amended) A method of automating an electronic-commerce transaction using a virtual shopping cart initiated at a host site, comprising: storing information about a plurality of schemas used by a plurality of heterogeneous and unrelated merchants' sites;

creating the virtual shopping cart based on a user's search query;
monitoring the content of the virtual shopping cart; [[and]]
collecting and managing information from the plurality of heterogeneous
and unrelated merchants' sites, across multiple independent transaction
sessions initiated by the host site, based on the user's search query, and
returning a corresponding comparative search result, without requiring the user
to leave the host site to visit the plurality of heterogeneous and unrelated
merchants' sites while the comparison shopping engine is automatically
collecting and managing information from the plurality of heterogeneous and
unrelated merchants' sites; and

selectively communicates with the plurality of heterogeneous and unrelated merchants' sites using at least one of the schemas in the merchant schema database, in order to execute a transaction for each item in the virtual shopping cart.

## 12 - 13. (Canceled)

- 14. (Currently amended) The method of claim [[13]] 11, further comprising maintaining the plurality of data structures necessary and the plurality of schemas.
- 15. (Previously presented) The method of claim 14, further comprising storing a plurality of data structures necessary to manage a plurality of shopping carts

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and items contained in the plurality of shopping carts.

16. (Previously presented) The method of claim 15, wherein storing information about the plurality of schemas comprises storing information about the plurality of merchants, their communication protocols, and how any one or more of the following functions are implemented for each merchant:

- add function, that adds an item to the virtual shopping cart;
- checkout function, that guides the shopper through a check out process;
- account retrieval feature, that provides account information;
- confirm order feature, that confirms a shopper's order;
- order confirmation feature, that receives order confirmation data.
- 17. (Previously presented) The method of claim 15, wherein collecting and managing information comprises parsing and analyzing the shopping request related to an item in the virtual shopping cart, to retrieve a corresponding merchant protocol.
- 18. (Currently amended) A computer program product for automating an electronic-commerce transaction using a virtual shopping cart initiated at a host site, comprising:

a merchant schema database that contains information about schemas used by a plurality of heterogeneous and unrelated merchants' sites;

a shopping cart manager that creates the virtual shopping cart based on a user's search query, and that monitors the content of the virtual shopping cart; and

a comparison shopping engine that automatically collects and manages information from the plurality of heterogeneous and unrelated merchants'

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sites, across multiple independent transaction sessions initiated by the host site, based on the user's search query, and that returns a corresponding comparative search result, without requiring the user to leave the host site to visit the plurality of heterogeneous and unrelated merchants' sites while the comparison shopping engine is automatically collecting and managing information from the plurality of heterogeneous and unrelated merchants' sites; and

a protocol broker module that selectively communicates with the plurality of heterogeneous and unrelated merchants' sites using at least one of the schemas in the merchant schema database, in order to execute a transaction for each item in the virtual shopping cart.

## 19. (Canceled)

- 20. (Currently amended) The computer program product of claim [[19, further comprising a protocol broker module that communicates with at least one of the plurality of heterogeneous merchants' sites using at least one of the schemas in the merchant schema database.]] 18, further comprising a user profile manager that maintains a user profile database and the merchant schema database.
- 21. (Currently amended) [[The system of claim 1]] <u>The computer program</u> product of claim 20, wherein the user profile database comprises a user ID.
- 22. (Currently amended) [[The system of claim]] <u>The computer program</u> product of claim 21, wherein the user profile database further comprises a user password.

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23. (Currently amended) [[The system of claim]] <u>The computer program</u> product of claim 21, wherein the user profile database further comprises a user's address.

- 24. (Currently amended) [[The system of claim]] <u>The computer program product of claim 21</u>, wherein the user profile database further comprises a user's credit card information.
- 25. (Currently amended) [[The system of claim]] The computer program product of claim 21, wherein the user profile database further comprises a user's account information.
- 26. (Currently amended) [[The system of claim 1]] <u>The computer program product of claim 20</u>, wherein the user profile database comprises a user's account information, if any, with the merchants' sites.

27 - 46. (Canceled)